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Ministry of Agriculture, Fisheries and Food

Food Advisory Committee Annual Report 1994

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Food Advisory Committee Annual Report 1994

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CONTENTS

Paragraph

FOREWORD

INTRODUCTION

Terms of reference, membership and scope 1–5

THE COMMITTEE'S WORK IN 1994

I DEREGULATION 6

- a) **Food Additives** 7
- b) **Food Contact Materials** 8
- c) **Food Labelling** 9
- d) **Compositional Regulations** 10–13
- e) **EC Directive on Foods for Particular Nutritional Uses** 14
- f) **Future Consideration** 15

II LABELLING AND INFORMATION

Graphical Representation of Nutrients on Food Labels 16–17
Labelling for Food Use of Certain Classes of Animals from Transgenic Breeding Programmes 18

III ADDITIVES AND OTHER SUBSTANCES USED IN OR IN CONNECTION WITH FOOD

Additives/Novel Foods Overlap 19
- a) **Alkaline Hydrogen Peroxide-Treated Oat Fibre** 20
- b) **Esterified Propoxylated Glycerol** 21

Enzymes 22
- a) **Immobilised lipase from *Rhizopus niveus*** 23–25
- b) **Hemicellulase from *Aspergillus niger*** 26
- c) **Hemicellulase in Breadmaking** 27
- d) ***Alpha*-Acetolactate Decarboxylase** 28

Hydrocarbon Propellants: Propane, Butane and Iso-Butane 29–31

IV SAFETY ISSUES

Food Intolerance 32–34
Interpretation of Acceptable Daily Intakes in Food Chemical Risk Assessment 35–36
Risk Management Research and Development 37
Risk/Benefit Analysis and Maximum Tolerable Concentrations of Contaminants 38
Maximum Tolerable Concentrations for Heavy Metals in Food: Cadmium 39–40

Paragraph

Problems arising from the Use of Unlicensed Traditional Remedies from China and the Indian Subcontinent 41–42
Patulin in Apple Juice 43

V OTHER MATTERS

Changes in the UK Market for Artificial Sweeteners and their Implications for the Intake of Sweeteners 44–45
EC Scientific Co-operation: Update on Administrative Management and Programme of Work 46
Work of the Steering Group on Chemical Aspects of Food Surveillance – Streamlining the Consideration of Food Surveillance Papers 47
Food Surveillance Paper on the Authenticity of Fish and Fish Products 48–50

ANNEXES *Page*

I THE ROLE OF THE FOOD ADVISORY COMMITTEE AND ITS RELATIONSHIP WITH OTHER COMMITTEES 13

II LIST OF FAC MEMBERS 17

III REGISTER OF MEMBERS' INTERESTS 19

IV REFERENCES 24

V LIST OF ABBREVIATIONS 26

FOREWORD

I was very pleased to be invited by the Minister to take over from Dr Ewan Page as Chairman of the Food Advisory Committee. This Committee and its predecessors have a long history in providing sound advice to Ministers. This may involve scientific and technical analysis, views on the practicalities of enforcing particular courses of action, and views on the likely impact on both consumers and industry. The membership of the Committee seems well balanced to cover the whole range of relevant issues – we have academic and industrial members with scientific and technical backgrounds, members involved in enforcement, and members with a background in consumer issues. The Committee also, of course, uses common sense and pays attention to changes in public thinking.

Over the past year the Committee has advised on a very wide range of issues. The pressure for advice in advance of EC legislation has slackened, as events in Brussels now appear to be moving at a slower pace. On the other hand, the Committee has been asked to comment on a wide range of proposals for trimming back food law. It has also considered a number of narrower issues, such as the use of enzymes for specific purposes. This report gives the details. In 1995 we expect to continue our scrutiny of deregulation proposals, to develop a systematic approach to contaminants and to suggest how people might make better use of nutrition labelling. In all these areas we have to consider how best to update procedures and practices to match today's needs.

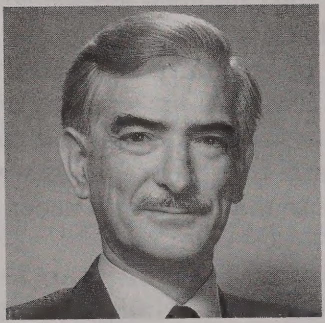
I am grateful to Dr Ewan Page for leaving me so secure a platform. In his six years as Chairman Dr Page brought enthusiasm and knowledge to the Committee and guided it in its continuing advisory role. I look forward to the challenges of my first full year as Chairman.

Colin Campbell

PROFESSOR SIR COLIN CAMPBELL
Chairman

FAC COMMITTEE MEMBERS
(As at 1 November 1994)

Professor Sir Colin Campbell
(Chairman)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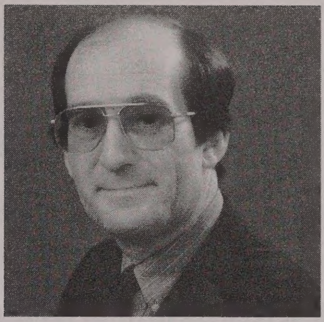
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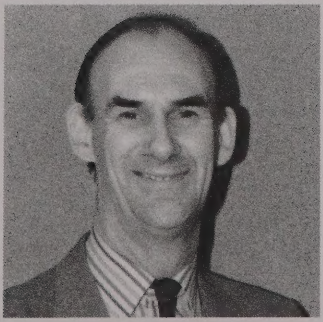
Mr Philip Strachan

Professor Frank Woods

INTRODUCTION

TERMS OF REFERENCE, MEMBERSHIP AND SCOPE

1. The Food Advisory Committee (FAC) is an independent non-statutory body appointed by Ministers and has the following terms of reference:

> 'To assess the risk to humans of chemicals which are used or occur in or on food and to advise Ministers on the exercise of powers in the Food Safety Act 1990 relating to the labelling, composition and chemical safety of food. In exercising its functions the Food Advisory Committee will take the advice and work of the Committee on Toxicity and other relevant advisory committees into account.'

2. The Committee's main task is to review and prepare reports on all matters within its terms of reference and where necessary to make recommendations for legislation. The Committee gives its advice to Ministers who may then decide to make that advice public. Its role and its relationship with other committees are described in more detail at Annex I.

3. A list of members of the Committee is at Annex II. The terms of appointment of the Chairman and five members of the Committee expired at the end of October 1994. Professor Sir Colin Campbell (Vice-Chancellor, University of Nottingham) succeeded Dr Ewan Page (formerly Vice-Chancellor, University of Reading) as Chairman from 1 November. Three members – Professor Marian Hicks (Science Director, United Biscuits (UK) Ltd), Dr John Stevens (Technical Director, St Ivel Ltd) and Dr Roger Whitehead (Director of the Medical Research Council, Dunn Nutrition Unit) – were replaced by Mr Tom Miller (Technical Services Manager, Whitbread plc), Professor Christopher Ritson (Professor of Agricultural Marketing, University of Newcastle-upon-Tyne) and Mr Philip Strachan (Development and Quality Assurance Director, Colman's of Norwich). Two members, Mrs Joy Hardinge (Head of Legislation (Flavours and Ingredients), Quest International) and Mr Roger Manley (County Fair Trading and Advice Officer, Cheshire County Council), were reappointed for a further 3-year term.

4. Members are appointed to the FAC because of the expertise they have gained through their professional involvement with the food industry or food issues generally. Committee members are required to declare any interest in matters to be discussed. The Chairman may then, at his discretion, limit the participation of a member in a discussion. The Committee and Ministers consider it important that the Committee's advice should not be subject to suspicion of bias on the grounds of undeclared commercial interests. A formal register of members' interests has therefore been established and is published at Annex III of this Report.

5. This Report covers the business considered at the six meetings held by the Committee during 1994.

THE COMMITTEE'S WORK IN 1994

I DEREGULATION

6. In September 1993, the then Minister (Mrs Shephard) announced the Ministry's plans for food law deregulation⁽¹⁾ and towards the end of that year the Committee considered a general paper which began the process of looking at proposals for deregulation in specific areas which fall within its remit – food labelling, food additives, compositional regulations and food contact materials. This examination has continued through 1994. Apart from those compositional regulations which are not based on EC legislation, the Committee recognised that these areas were 'occupied territories' and any proposals that might be made would be subject to the constraints of the relevant EC Directives. The responsible policy divisions within the Ministry had reviewed the regulations and their preliminary ideas had been the subject of consultation with interested parties.

a) Food Additives

7. The consultation revealed that there was widespread support for the continued control of food additives by regulations. The Committee accepted that this should continue on the grounds of food safety and consumer protection. It noted that the UK had an EC obligation to regulate most classes of additives, and that adoption of three new EC Directives covering colours, sweeteners and additives other than colours and sweeteners(2–4) might allow for some simplification of the UK's current additives regulations.

b) Food Contact Materials

8. The review had taken the form of a study of the types of food contact materials used, the market for these materials and the EC legislation being developed. It sought interested parties' views on the conclusions and recommendations of the study. Industry had welcomed the principle of harmonisation which would have a deregulatory impact and improve its competitive position but it had noted that as, historically, food contact materials had not been as closely regulated in the UK, an effective system of control could be technically demanding and expensive. The Committee has not yet drawn any conclusions from the study, pending consideration of the results of a further consultation exercise to be presented in early 1995.

c) Food Labelling

9. The Committee considered a detailed report of the current exercise to consolidate and review the Food Labelling Regulations so as to ensure that they were consistent with the aims of the EC Food Labelling Directive and that their requirements were laid down as clearly as possible. The opportunity had been taken to incorporate into the review, where appropriate, those recommendations for changes made by the Committee in its 1990 Review of Food Labelling(5) in the areas where the UK still had national discretion to act. Whilst recognising that most of its recommendations required action at EC level, the Committee urged officials to press for their implementation wherever possible. After considering those issues where specific comments had been received as a result of the consultation exercise, the Committee recommended that:

(i) the number of categories of additive to be identified when food is sold loose or prepacked by retailers and caterers for direct sale should be maintained at six rather than increased to 22 with a new requirement to declare when such a food contains other additives;

(ii) the consumer should be provided with clear information as to the name of the food when buying foods prepacked for direct sale, but a date mark was not necessary for such foods;

(iii) the requirement to provide alcoholic strength information for a representative sample of the alcoholic drinks sold by the glass in pubs, restaurants, etc. should be retained;

(iv) the names under which species of fish can be sold should continue to be prescribed by law;

(v) use of non-natural flavourings should be indicated in the name of the food by the use of the term 'taste' and the term 'flavour' should not be allowed; and

(vi) the wording of the Regulations should, where possible, be the same as the corresponding EC Directive.

The Committee's advice will be put to Ministers early in 1995.

d) Compositional Regulations

10. The Committee considered papers on the deregulation of five compositional regulations covering ice cream, skimmed milk with non-milk fat, cream, cheese and bread and flour. The general feeling of the Committee was that all five regulations could be simplified and that some might be revoked. The Committee did not, however, reach any firm conclusions but preferred to await the results of a further consultation exercise to be carried out on each of the Regulations before advising Ministers.

11. The review of the **Ice Cream Regulations 1967**(6) had recommended that the regulations be revoked leaving the terms 'ice cream', and 'dairy ice cream' as customary names under the Food Labelling Regulations 1984. The Committee wished to give further consideration to this recommendation following the further consultation exercise. On the **Skimmed Milk with Non-Milk Fat Regulations 1960**(7) the review had recommended the revocation of these regulations. The Committee agreed that much of this legislation could be revoked once the EC Directive on infant formulae and follow-on formulae(8) came into effect. It did, however, wish the warning label for products not suitable for infants to be retained. The review of the **Cream Regulations 1970**(9) had proposed revocation of reserved descriptions, including the minimum fat content and their replacement with a requirement for the name of the food to be sufficiently precise to describe the product to indicate the actual milk fat content of the cream. The Committee deferred a decision on whether to advise that reserved descriptions should be retained or that a percentage fat indication should be required instead.

12. The Committee considered the main areas of difficulty with the current **Cheese Regulations 1970**;(10) the responses received as a result of consultation on the proposals to review them; information on legislation in other member states for native cheeses; and statistics on the main sources of continental cheeses and their relative importance in terms of total UK cheese consumption. In considering whether the Regulations should be revoked, the Committee compared the proposals with the recommendations of the 1982 Food Standards Committee Report on Cheese.(11) The Committee considered that, in the absence of any quantitative ingredient declaration legislation, it would be in consumers' interests for a definition of cheese to be retained, but that the present definition should be updated and improved. It also took the view that the composition of UK cheeses should be regulated and thus the current UK compositional standards should be reviewed and updated. The Committee also recommended that the percentage fat content should be declared and that 'low fat' claims should be covered by the nutrition labelling declaration.

13. The review of the **Bread and Flour Regulations 1984**(12) had proposed the revocation of the regulations that dealt with the statutory fortification of bread, name of the food and other labelling provisions. It was suggested that the only provisions that should be retained were those dealing with additives. The Committee expressed some concern about revocation of fortification requirements as it felt that this might lead to consumers turning to other methods of supplementing their diets. It was particularly concerned to know whether the scientific case for fortification in general remained valid and particularly whether there was a continued need for flour to be fortified with folate. As the Committee on Medical Aspects of Food Policy (COMA) took the lead on fortification and was currently preparing a report, the Committee felt that it should return to this important issue once COMA's recommendations were known.

e) EC Directive on Foods for Particular Nutritional Uses

14. The Committee considered a paper which gave details of an EC Commission proposal to amend the framework directive covering foods for particular nutritional uses(13) which was adopted in 1989. This Directive provides for more specific directives to be drawn up for nine categories of food. The Committee noted that the Commission had now reconsidered the need for all these subsidiary directives and had drawn up proposals to retain only five of the original nine categories: infant formulae and follow-on formulae (for which a Directive had already been adopted,(8)) weaning foods, slimming foods and foods for medical purposes. The Committee was told that the responses received from the UK consultation exercise had been supportive of the Commission's proposals. The Committee welcomed the proposal to remove four categories from the list of planned directives: low sodium and gluten-free foods, and foods for diabetics and sportsmen. It agreed that these foods were unlikely to be significantly different in composition from ordinary foods and could be controlled by means of legislation on claims. The Committee was not convinced that slimming foods and medical foods needed specific compositional controls but recognised that there might be pressure from other member states for them. It advised that officials should take the opportunity, in negotiating these proposals in Brussels, to press for the work on claims to be advanced.

f) Future Consideration

15. Deregulation is an issue that is likely to figure prominently in the Committee's future programme of work. The European Commission is also carrying out its own review of EC compositional directives and any amendments to these directives are likely to lead to amendment of the relevant UK regulations. The Committee will consider this when the Commission's conclusions are known.

II LABELLING AND INFORMATION

Graphical Representation of Nutrients on Food Labels

16. In July 1993, the Committee received a report of the responses to a consultation document circulated earlier that year on the graphical representation of nutrients on food labels. The consultation exercise had proved inconclusive in identifying preferred graphical formats and the Committee had requested further information on research into graphical labelling and on the schemes that currently operated in other countries. The Committee examined this additional information. It reiterated its view that labelling was no substitute for education and that the principal objective of nutrition labelling should be to assist consumers in making comparisons between different products. It considered the essential criteria for considering any future graphical labelling system were:

(i) to be understandable and useful to the consumer;

(ii) not to mislead the consumer;

(iii) to help the consumer select foods;

(iv) to fit in with current nutrition advice and education; and

(v) to encourage manufacturers to use it.

Before giving further consideration to a requirement for additional graphical labelling, the Committee wanted to see further investigations into how the existing nutrition information on labels was used by consumers. To this end the Committee agreed that a joint Working Group with members of the Nutrition Task Force (NTF) should be established.

17. This joint FAC/NTF Working Group, chaired by Mr Roger Manley of the FAC and comprising two other FAC representatives and three members of the NTF, has decided that a survey should be undertaken of the ways in which nutrition information on labels is currently being used. The results are expected in Spring 1995, after which the Working Group will report back to both the FAC and NTF with suggestions for possible approaches which might warrant further consideration.

Labelling for Food Use of Certain Classes of Animals from Transgenic Breeding Programmes

18. During 1994, the Advisory Committee on Novel Foods and Processes (ACNFP) considered an animal breeding programme intended to produce genetically modified pigs that would provide human compatible organs for transplant purposes. It concluded that there were no safety or ethical reasons to prohibit the use for food of those animals which had been used in the programme but had not been found to be genetically modified. It then asked the FAC for advice on the labelling of food derived from these breeding programmes. The FAC noted that in all cases the animals in question would first have been tested to establish whether they had been genetically modified or had not and should therefore be excluded from the breeding programme. Whilst accepting the ACNFP's safety assessment, the Committee took the initial view that animals of the kind described should not be used for food and that, if they were, the food should be clearly labelled. The Committee would need to consider the form of labelling which might apply in these circumstances. In the event, the company withdrew its application before the FAC prepared its advice to Ministers.

III ADDITIVES AND OTHER SUBSTANCES USED IN OR IN CONNECTION WITH FOOD

Additives/Novel Foods Overlap

19. The Committee discussed the uncertainty about the scope of current and proposed EC legislation in the areas of novel foods and food additives. The Committee was concerned that once the EC Novel Foods Regulation(14) was adopted, a situation could arise where substances which were similar or performed similar functions would be controlled by different legislation – either under the Additives Framework Directive(15) or the Novel Foods Regulation. It asked that officials try to obtain definitive guidance from the European Commission as to the scope of both pieces of legislation. In the absence of such guidance, the Committee considered the status of two substances: alkaline hydrogen peroxide-treated oat fibre and esterified propoxylated glycerol.

a) Alkaline Hydrogen Peroxide-Treated Oat Fibre

20. It was proposed to use this product as a source of additional dietary fibre in baked goods such as white bread and cakes. The Committee concluded that the product was not an additive and so it did not fall within its ambit. It was either a novel food or a novel process. Thus if product evaluation was required it should be referred to the ACNFP.

b) Esterified Propoxylated Glycerol

21. It was proposed to use this product as a lower calorie replacement for fats and oils in 'cold' applications such as ice cream and chocolate and for 'hot' applications such as deep frying. The Committee did not consider it could make a judgement on the information provided and asked that further data on the technological uses of esterified propoxylated glycerols be obtained from the company.

Enzymes

22. The 1993 Annual Report(16) noted that the Committee had agreed an order of priority for dealing with applications for the assessment of enzymes added to foods. It had concluded that it would not be sensible to undertake a full review of all food enzymes, since this would take a considerable amount of time and would probably be overtaken by Community action. It had, however identified three categories of enzymes which ought to be evaluated in the near future:

(i) those whose evaluation had been requested by Ministers or by other expert committees, such as the ACNFP;

(ii) those whose evaluation was required in connection with issues coming before the Committee, such as proposals for EC legislation or amendments to UK commodity regulations; and

(iii) those derived from genetically modified organisms (GMOs) where submissions had been received by MAFF before June 1993.

Following these recommendations, in 1994 the Committee considered three applications for individual enzyme preparations, and one general issue regarding enzymes permitted for use in UK breadmaking.

a) Immobilised lipase from *Rhizopus niveus*

23. Immobilised lipase from *Rhizopus niveus* was the first enzyme preparation cleared by the Committee on Toxicity (COT) under the new review procedure. This enzyme preparation is intended for use in a novel process to modify vegetable oils for use as cocoa butter substitutes in chocolate and confectionery products. The novel process had been approved by the ACNFP in 1993,(17) subject to consideration by the COT and the FAC on the safety in use of the enzyme used in the process.

24. The COT recommended temporary clearance pending the submission of further data (within 1 year). The FAC considered the COT's advice and three main issues relevant to this enzyme preparation, specifically:

(i) whether any labelling provisions would be required;

(ii) whether sufficient information had been provided (by the company) to demonstrate that a suitable quality control system was in place to ensure the safe and consistent manufacture of the product; and

(iii) the suitability of the proposed specification for the enzyme.

25. The Committee felt that there was no labelling issue to be addressed as the enzyme was not present in the final food. It was also content with the proposed specification. The Committee acknowledged that the Japanese-based company employed standard procedures for manufacture and quality assurance, in line with the Japanese Ministry of Health and Welfare guidelines for the Manufacture of Bulk Pharmaceutical Chemicals. The Committee was satisfied that a suitable quality control system was in place to ensure the consistent manufacture of the enzyme preparation. It recognised that there was no specific legislation in this area, but saw no reason to reject the acceptability of the enzyme preparation (pending the submission of further data requested by the COT) for use in the production of modified vegetable oil as a cocoa butter substitute in chocolate and confectionery.

b) Hemicellulase from *Aspergillus niger*

26. In 1992, the Committee had agreed that there was a case of need for the use of hemicellulase in breadmaking pending advice from the COT on its safety in use. A number of submissions were subsequently received on individual hemicellulase preparations and the COT had given temporary clearance to one particular preparation, pending the submission of further data within 1 year. The Committee considered that sufficient information had been provided by the company to demonstrate that a suitable quality control system was in place to guarantee the consistent manufacture of the product and that the proposed specification was suitable for this enzyme preparation. It recommended temporary clearance of this enzyme preparation subject to a review, within a year, of additional data requested from the company on those areas which the COT felt had not been adequately addressed.

c) Hemicellulase in Breadmaking

27. The use of enzymes and other ingredients in the manufacture of bread is currently controlled by the Bread and Flour Regulations 1984.(12) *Alpha*-amylases and proteinases are the only types of enzyme preparation which are permitted for use. The Committee considered how these Regulations might be amended to permit the use of hemicellulase enzymes in breadmaking. Proposals had been issued for the deregulation of the Bread and Flour Regulations which had suggested that the current provisions for the use of additives, including enzymes, in breadmaking would be retained until the implementation of relevant EC legislation. The Committee was anxious to recommend a solution which would be no more restrictive than the current generic approval for other enzymes used in breadmaking. It recognised that enzymes used in other applications were not subject to any specific controls. The Committee considered that it was sufficient to amend the Bread and Flour Regulations to permit the use of hemicellulases in breadmaking, by simply authorising 'hemicellulases' without making any reference to individual preparations. This would allow bakers to use any hemicellulase preparation subject to the general provisions of the Food Safety Act. In reaching this conclusion, the Committee recommended that the baking industry should be encouraged to use only those enzymes which had been assessed by the FAC and COT. It agreed that there was no need for the use of hemicellulase enzymes in breadmaking to be indicated by labelling, which was consistent with the existing arrangements for other permitted enzymes.

d) *Alpha*-Acetolactate Decarboxylase (ALDC)

28. The Committee considered the case of need for ALDC to accelerate the maturing of beer. This was the first stage in the voluntary evaluation of an enzyme preparation which is derived from a genetically modified *Bacillus*. Of the Committee's criteria for establishing a case of need, the two most relevant factors were the need for palatability and the potential economic advantage to be gained from using this enzyme. The Committee accepted that a case of need had been established based on ALDC's ability to reduce the amount of diacetyl in beer (a substance which causes flavour defects, and can seriously affect beer quality), the economic benefits provided by ALDC in reducing the maturation times normally required to remove diacetyl and its ability to improve the flexibility of the brewing industry to respond to fluctuations in market demand. The Committee also believed the use of this enzyme could benefit the UK industry's competitive position. This application has now been referred to the COT and the ACNFP to consider the enzyme's safety in use.

Hydrocarbon Propellants: Propane, Butane and Iso-Butane

29. The use of propellants in food is controlled by the Miscellaneous Additives in Food Regulations 1980(18) under which propane, butane and iso-butane are not currently permitted. The Committee had already agreed a case of need for the use of these propellants in vegetable spray products and the COT had given a favourable toxicological assessment. The Committee accepted that these products were safe on toxicological grounds but their flammability gave rise to concerns about the wider safety implications in use for the consumer. The advice of the Laboratory of the Government Chemist (LGC) and the Health and Safety Executive (HSE) was sought. Both the LGC and the HSE concluded that the products were unacceptably hazardous taking account of the environment in which their use was intended. In the light of this, the Committee did not feel that it could recommend approval.

30. The Committee's advice was put to Ministers who accepted the Committee's advice that, as the fire hazard was unusually severe, the approval of the propellants in the pan spray should be withheld. Ministers, however, approved the use of the propellants in a garlic spray for the sole use of preparing garlic bread as they considered that the concerns over the safety of the product near a naked flame did not apply in this case.(19)

31. Although the recently adopted European Parliament and Council Directive on food additives other than colours and sweeteners(4) does not include these propellants in its permitted list, Ministers intend to allow their use for this one particular purpose. They will make use of a 2-year temporary authorisation allowed for under the food additives framework directive (described in Annex I, paragraph 1) when the directive is implemented in UK legislation.

IV SAFETY ISSUES

Food Intolerance

32. Ministers were very concerned that consumers had eaten food unaware that it had contained peanuts and some who had a peanut allergy had suffered severe, and even in a few cases fatal, results. MAFF and the Department of Health (DH) had met representatives of food manufacturers, retailers and caterers, consumers and enforcement authorities with the aim of raising awareness of this problem. The Committee was asked to consider the problems arising from peanut allergy and also the general issue of food intolerance.

33. The Committee was told of MAFF's past, current and planned research in the area of food intolerance, the information that had been produced by MAFF and the DH and the labelling issues involved. It noted that self-diagnosis and treatment by excluding foods from the diet placed individuals at risk of failing to identify a serious illness as well as of nutrient deficiency. It then focused on the particular problem of allergy to peanuts and nuts and considered the action that had been taken to raise awareness. The Committee welcomed the commissioning of specific research in the hope that investigations into the identification of specific allergens in peanuts and peanut oil would prove beneficial. It noted that a free booklet on food intolerance was to be issued by MAFF (this has now been issued(20)), containing useful advice to consumers who felt they might suffer from intolerance reactions to food and food additives. The Committee endorsed the following advice provided by this booklet:

(i) if individuals were worried that they had a food allergy they should consult their GP, especially if they suspected they might react badly to peanuts, nuts or shellfish;

(ii) concerned individuals should bear in mind that symptoms might be due to illness that should be diagnosed and treated, rather than a reaction to food;

(iii) concerned individuals should keep to a varied diet and should not cut out foods on the basis of unproven tests or without expert advice on how to keep meals balanced;

(iv) if a food allergy or other form of food intolerance were identified, the sufferer should seek the advice of a dietitian on how to avoid a problem food whilst maintaining a balanced diet; and

(v) sufferers should use ingredient labels to help avoid any problem foods; the Committee's earlier advice(5) on removing the exemptions to ingredient listing should be implemented as quickly as possible.

The Committee also noted that more specific guidance was being prepared for the sufferers of nut and peanut allergies to help them manage their condition. It was intended to circulate this guidance to GPs and to groups which represented or helped sufferers.

34. The Committee welcomed the efforts that had been made to raise awareness. It agreed to maintain a close watch on developments. In the meantime it stressed the importance of vigilance on the part of possible sufferers and the need for them to seek medical advice.

Interpretation of Acceptable Daily Intakes in Food Chemical Risk Assessment

35. In taking decisions about food safety issues Ministers have always placed considerable weight on the advice of expert Committees and on the fact that this advice is based on an independent scientific evaluation of the facts. In practice, however, the process whereby advice is formulated is a complex one which takes into account not only formal science-based risk assessment but also a range of other factors such as costs of action proposed and consumer perceptions. Generally the Committee receives its safety advice from the COT as part of the formal decision process. The COT provides advice in a numerical form as an acceptable daily intake (ADI), but the FAC also has the important job of taking the process a stage further by weighing the other relevant factors to provide risk management advice.

36. The Committee was asked to consider whether it needed more information on interpretation of ADIs and how it should take account of intakes, particularly by children. It was satisfied that the ADI was the best available tool for the purpose of risk assessment, recognising that the COT would take account of the possibility of some people occasionally exceeding the ADI and would draw the Committee's attention to those cases where exceeding the ADI on a single occasion might be significant.

Risk Management Research and Development

37. The Committee considered MAFF's risk management research programme, aimed at developing techniques which will allow 'non-technical' information to be incorporated into the process of food risk decision making. 'Non-technical' factors which might be considered included alternative policy options, consumers' risk perceptions, risk communication factors and economic analyses. It was proposed that the research programme should consider each of these factors separately and it should also develop a 'risk evaluation framework'. The Committee asked for a further paper to be prepared where the techniques under development could be applied to various worked examples which the Committee had previously considered, to see how the programme might help the Committee form its advice in future.

Risk/Benefit Analysis and Maximum Tolerable Concentrations of Contaminants

38. The Committee considered some general risk/benefit approaches that have been developed for use in regulations used in areas other than food safety; and discussed whether any of these methodologies could be of value to the Committee. For some foods, the levels of contamination measured in surveillance would cause some consumers to approach or possibly exceed the limits on tolerable intakes recommended by toxicologists. For some contaminants, it would not even be possible to set tolerable intakes because there was no toxicity threshold, such as the case of genotoxic carcinogens. In these situations, the Committee might be asked to recommend concentration limits which could be used in negotiations in Brussels. This would involve a difficult judgement. If limits were set too low they could have severe economic effects on food producers. Setting limits that were too high would only have a minimal effect on reducing intakes. Whilst risk/benefit analysis aims for full quantification, this is unlikely to be a realistic objective in the case of food hazards. It is, therefore, necessary to consider alternative approaches to suit the unique characteristics of the problem and the Committee had an initial discussion of the factors which should be taken into account. The Committee's discussion focused principally on the 'as-low-as-reasonably-practicable' (ALARP) principle. This is a development of risk/benefit analysis which sets a boundary above which risks should never be tolerated and another below which risks are negligible. In the ALARP band, between the boundaries, benefits in terms of further risk reduction could be balanced against the costs of control. The Committee recognised that there was a need for a formalised risk management strategy and in principle believed that the ALARP-based approach could be a useful tool. Before fully endorsing and making use of it, however, the Committee requested that several case studies be carried out into how the ALARP approach could be applied to the regulation of chemical contaminants.

Maximum Tolerable Concentrations for Heavy Metals in Food: Cadmium

39. The Committee's advice was sought on the appropriate methodology for setting maximum tolerable concentrations (MTCs) of contaminants in food, taking cadmium as an example. The calculations used surveillance data together with consumption figures for individual food groups and either the JECFA Provisional Tolerable Weekly Intake (PTWI) or a similar tolerable intake figure to calculate the MTCs of a contaminant for the food group in question, in order to ensure that the intake from the whole diet did not exceed the PTWI. The calculations showed that for cadmium the MTCs were generally well above the range of surveillance data. Nevertheless, as certain foods (such as shellfish and kidneys) accumulated cadmium, the PTWI might be exceeded by a moderate or upper range consumer of such foods. For such groups, a different approach was required, and the Committee was asked to consider whether the ALARP approach (described in paragraph 38 above) would be the most appropriate.

40. The Committee accepted that MTCs derived from these calculations provided a basis for advice on levels of cadmium that may be tolerated in food and would provide the basis for a sound negotiating position should the European Commission decide to harmonise legislation for certain contaminants. It was concerned that some of the surveillance data were now relatively old and was pleased to hear that the Ministry was carrying out further surveillance on cadmium levels. It did not wish to take a final view on the ALARP approach until the case studies requested during the Committee's previous discussion had been completed.

Problems arising from the Use of Unlicensed Traditional Remedies from China and the Indian subcontinent

41. The Committee had previously considered herbal remedies containing comfrey and certain other herbal ingredients which have been traditionally used in the UK. As a means of monitoring the toxicological problems which might be caused by the use of dietary supplements and herbal remedies which do not have medicinal product licences, they had welcomed the work of the Guy's Hospital Poisons Unit (PU). The PU's surveillance activities were considered by the COT which concluded that there was sufficient clinical evidence to suggest that the use of some traditional Chinese remedies, and some from the Indian subcontinent, gave cause for concern in the UK.

42. The Committee considered the main concerns arising from specific cases and discussed a number of courses of action. It recognised that this was a very complex issue which required a multi-layered approach. Before recommending any detailed action, it asked officials to report back to the Committee once they had talked to a wide range of interested parties.

Patulin in Apple Juice

43. The Committee's consideration of the mycotoxin patulin in apple juice was reported in both its 1992(21) and 1993(16) Annual Reports. In 1994 the Committee studied the results of further MAFF surveillance and industry's own monitoring data on the levels of patulin in apple juice. It was also updated on the action taken in relation to its original recommendations to reduce levels. It noted that the reliability of the analytical methods used for detection had improved and that laboratories' performances were now comparable to those for other mycotoxins. In terms of surveillance, the situation had improved although a few samples had been found to be in breach of the advisory limit of 50 micrograms per litre (μg/l) of apple juice set by the Committee in 1992. The Committee was pleased to see that the Ministry had taken prompt action to announce these results and seek withdrawal of the batches from which the samples came. The Committee agreed that, as none of the juices prepared from concentrates had exceeded the advisory limit, further surveillance during 1995 should be targeted on retail apple juices which had been directly produced. It also considered that the advisory limit of 50 micrograms per litre (μg/l) of apple juice should not be reviewed until further research had been completed.

V OTHER MATTERS

Changes in the UK market for Artificial Sweeteners and their Implications for the Intake of Sweeteners

44. This was the third sweeteners market update report the Committee had seen since its consideration in 1989 of the results on intake surveys of the general and diabetic populations carried out in 1987/88. The Committee considered that the changes in the market which had been identified since the last market update did not warrant further action to control sweetener intakes. It asked to continue to receive annual updates and the results of further surveys, particularly those on sweetener intakes by diabetics and by children aged 1½–4½ years. It agreed that a further general diary record survey of sweetener intakes by the UK population was not appropriate until such time as the market had responded to the changes imposed by implementation into UK law of the recently adopted European Parliament and Council Directive on sweeteners for use in foodstuffs.(3)

45. The Committee expressed disappointment that some manufacturers had not implemented its 1991 advice on extra labelling for saccharin-based table-top sweeteners for diabetic consumers. As a result, a small survey was carried out on the labelling of table-top sweeteners. Whilst the Committee was pleased to note that certain manufacturers had either adopted or were intending to adopt the voluntary label, it urged officials to continue to press for the advice to be implemented by as many manufacturers and retailers as possible.

EC Scientific Co-operation: Update on Administrative Management and Programme of Work

46. In 1993 the Committee was informed that an EC Directive on scientific co-operation(22) had been adopted which could lead to a greater reliance by the UK on the safety evaluations of the Scientific Committee for Food (SCF). The Committee was updated on the progress which had been made since its adoption. It was informed that an agreement had been reached on a system of administrative management and work was now being undertaken to establish and prioritise an inventory of tasks to be carried out under scientific co-operation. The Committee asked that a regular review be undertaken to consider whether any of its work could be pursued under the EC scientific co-operation procedure and has asked to be kept up to date with the development of the inventory of tasks.

Work of the Steering Group on Chemical Aspects of Food Surveillance – Streamlining the Consideration of Food Surveillance Papers

47. The Committee was updated on the role of the Steering Group on Chemical Aspects of Food Surveillance (SGCAFS) and was given details of the approach being taken by the Steering Group to identify priorities for food surveillance and related research and development. The Committee noted that a Sub-group on Resources had been set up to establish a mechanism which would allow the Steering Group to identify priorities and allocate resources to specific areas of work. The Committee welcomed the proposal to streamline its consideration of Food Surveillance Papers which would enable them to be placed in the public domain more quickly.

Food Surveillance Paper on the Authenticity of Fish and Fish Products

48. This paper was the first to be published by the SGCAFS Working Party on Food Authenticity. The Working Party was set up in October 1992 to help focus and direct the Ministry's extensive programme of work on food authenticity, to co-ordinate surveillance of authenticity problems and research into analytical methodology development; and to advise on the significance of results.

49. The paper described the activities of the Working Party in the fish and fish products sector and included the results of two surveys of species of fish used in fish products which had been carried out to determine whether adulteration or substitution had occurred. A survey of 35 brands of breaded scampi traced all adulteration with warm water prawn species to a single producer. A survey of named fish detected substitution in 14 of 184 samples. The Committee was pleased to note that enforcement authorities had been informed of the results of the surveys, which had no safety implications, and that follow-up action had been initiated.

50. The Committee, in noting that authenticity issues were an important aspect of consumer protection, welcomed the establishment of the Working Party and recommended that it continued to monitor the UK food supply and extend its programme of surveillance. The Committee agreed a statement which formed an appendix to the Food Surveillance Paper which was published in June 1994.(23)

ANNEX I

THE ROLE OF THE FOOD ADVISORY COMMITTEE AND ITS RELATIONSHIP WITH OTHER COMMITTEES

THE ROLE OF THE COMMITTEE

Assessment of food additives

1. With the recent adoption of specific European Parliament and Council Directives on food additives and forthcoming UK implementing legislation, the procedure for the assessment of additives has altered. Final approval of the use of a new additive is now subject to agreement at Community level, although there is a provision in the food additives framework directive 89/107/EEC(15) which enables a member state to authorise the use of a new additive on a temporary basis. If a manufacturer requests that a new additive should be permitted for use or that a new use should be allowed for an additive already permitted, the manufacturer should submit an application for its approval to the European Commission for it to be assessed by the SCF. Alternatively, or at the same time, an application may be submitted to the Food Advisory Committee to consider whether there is a genuine need for that additive or use. With the benefit of safety advice from the COT or from the SCF, the Committee formulates advice to Ministers who can then decide whether to take advantage of the provisions for temporary national authorisation. At the end of a 2-year period the additive may only continue to be permitted if the European Commission comes forward with a proposal to amend the appropriate directive and this is agreed by the Council of Ministers and the European Parliament.

Risk assessment

2. Risk assessment is a means of estimating potential harm. Any additive or other substance intentionally added to food is subject to risk assessment prior to approval and already approved ones are reconsidered in the light of new data or changes in intake levels (see paragraphs 3 and 5). Chemical contaminants are unintentional additions arising through a variety of routes (e.g. natural toxicants such as mycotoxins; soil contaminants such as metals; contaminants from intentional additives or by-products formed from intentional additives) and may therefore be harder to quantify than substances added intentionally. The Committee draws on the detailed work of the COT, other advisory committees and MAFF Food Science Divisions in order to assess risk.

3. For substances which are not genotoxic carcinogens, the COT provides its advice in the form of an acceptable intake. If intakes of a particular substance in the human diet are likely to increase because of new uses or changing dietary patterns so that there is a possibility of acceptable intakes being exceeded, the Committee will then advise on the management of that risk. It might, for example, recommend maximum levels of use of a new substance or that its use should be unlimited or prohibited. Chemical contaminants found in food may be judged by the same criteria as additives, though the measurement of absolute levels may present a greater practical challenge. Intake factors for certain contaminants may be subject to greater variation due to external factors. For example, natural toxicant levels may depend on ambient conditions both of growth and storage. Thus the complementary exercises of risk assessment and risk management become more complex. A regular system of monitoring is therefore essential. When new data concerning a currently approved additive or known contaminant are presented to the Committee, it may modify its previous advice on risk management.

4. In recent years the Committee's role in the risk assessment and risk management procedure has grown, largely as a consequence of the change in format of the safety advice offered by the COT. In the past the COT offered its advice in the form of categories A to E, which defined the degree of suitability of a food additive for use in food. The COT, in line with most expert advisory committees on food safety, now issues its advice in a numerical form as an acceptable daily intake (ADI). (When the estimated consumption of an additive is expected to be well below any numerical value that would ordinarily be assigned to it, an ADI 'not specified' may be allocated.) The ADI has most recently been defined by the WHO as 'an estimate of the amount of a food additive, expressed on a bodyweight basis, that can be ingested daily over a lifetime without appreciable health risk'. This change has meant that the FAC has become responsible for the final stage of the safety evaluation in so much as the advice in the form of an ADI needs to be related against current and likely future intakes of the additive concerned. This is necessary in order to determine whether advice on risk management is required to maintain intakes by UK consumers within acceptable limits.

Risk management

5. Where a potential risk to consumers is identified, the FAC balances this risk against evidence of possible benefit to consumers from the use of the substance or consumption of the food which may contain a contaminant. This allows the FAC to recommend strategies for the effective management of food chemical risks. In order to maintain intakes within acceptable levels, current and future uses of additives may need to be restricted. Similarly, the presence of chemical contaminants in a food may require either physical or chemical removal of the contaminant or the introduction of controls. In other cases, it may be more appropriate to issue advice to specific groups of the population who might be at potential risk of exceeding acceptable intakes.

Labelling

6. Food labelling is controlled by the Food Safety Act 1990 and the Food Labelling Regulations 1984 (as amended) which implement the EC Food Labelling Directive 1979. The Directive largely harmonises food labelling legislation throughout the European Union and there is now very little scope for unilateral national measures except for foods which are sold loose or in catering establishments. The Committee advises Ministers on labelling issues within this context. It advises on general policy, for example, in relation to EC proposals and it considers the need for special labelling for certain categories and individual products. The FAC's Report of its Review of Food Labelling and Advertising 1990(5) set out the Committee's broad philosophy in this area and stressed the importance of clear, accurate and informative labelling, with which Ministers agreed.

The European aspect

7. A further and increasingly important aspect of the Committee's role relates to the harmonisation of legislation on matters of food safety, labelling and consumer protection throughout the EC. The FAC is one element of a wide process of consultation and advice to Ministers which helps form the basis for a negotiating position in Brussels on those matters. A number of detailed measures still remain to be agreed following the establishment of the Single European Market and it is important that the UK plays a significant role in the formulation of EC legislation.

THE FOOD ADVISORY COMMITTEE'S RELATIONSHIP WITH OTHER GOVERNMENT ADVISORY COMMITTEES

8. The FAC was formed in November 1983, following the amalgamation of the Food Additives and Contaminants Committee and the Food Standards Committee. It forms part of a network of committees that advises Government on many different aspects of food. The maintenance of close links between these committees is vital to the Government's role in ensuring the continued safety of our food supply. The following paragraphs explain the FAC's relationship with some of these other committees.

Committee of Toxicity of Chemicals in Food, Consumer Products and the Environment (COT)

9. The FAC works very closely with the COT (see paragraphs 2–4 of this Annex), whose members are appointed by the Government's Chief Medical Officer (CMO) and whose remit is to advise on the toxic risk to humans of a wide range of substances affecting everyday life. The Chairman of the COT, Professor Frank Woods, is also a member of the FAC. Part of the COT's role is to evaluate data submitted in support of requests for approval of new additives or uses as well as other relevant information and it then advises the FAC on their safety in use. This role may, however, be partly subsumed by the SCF and by greater co-operation under the Scientific Co-operation Directive. The FAC takes full account of this advice in formulating its subsequent recommendations to Ministers. The COT also carries out regular reviews of existing substances to ensure, with the aid of the most modern analytical techniques and knowledge, that there are no new safety concerns. The FAC, in its role of risk assessment and risk management, therefore has to consider this safety advice in the context of actual and likely future intakes of the substance by UK consumers, in order to advise Ministers of any restrictions on food use which might be required.

Advisory Committee on Novel Foods and Processes (ACNFP)

10. The ACNFP is appointed to advise Health and Agriculture Ministers on matters relating to the manufacture of novel foods or foods produced by novel processes. The FAC, COT and the ACNFP work closely together at all times, such co-operation being illustrated by the way in which they continue to liaise over their considerations of different aspects of the application of genetic modification to food production. Professor Frank Woods, Chairman of the COT and a member of the FAC, is also a member of the ACNFP.

Steering Group on Chemical Aspects of Food Surveillance (SGCAFS)

11. The SGCAFS co-ordinates surveillance of the chemical safety, authenticity and nutritional value of the food supply. Much of its work is carried out through specialist working parties which cover the broad areas making up the Steering Group's current programme. All of this work is reported in Food Surveillance Papers which are published by HMSO. The FAC considers the papers in draft and then, in conjunction with advice from the COT, comments in the form of an FAC statement, which is normally published as an appendix. Mr Philip Strachan, a member of the FAC, is also a member of the SGCAFS.

Advisory Committee on the Microbiological Safety of Food (ACMSF)

12. The ACMSF advises Health and Agriculture Ministers on the risk to humans of micro-organisms which are used or occur in or on food and on matters relating to the microbiological safety of food. Two members of the FAC, Professor Douglas Georgala and Ms Barbara Saunders, are also members of the ACMSF.

Advisory Committee on Pesticides (ACP)

13. The ACP advises Ministers on any matters relating to the control of pests, including the regulatory control of pesticides. As the ACP takes into account any likely residue of pesticides that may be left in finished food products, the FAC keeps in touch with the ACP's work.

Veterinary Products Committee (VPC)

14. The VPC advises Ministers on the safety, quality and efficacy of veterinary medicinal products as defined in the Medicines Act 1968 and promotes the collection and investigation of information relating to adverse reactions. The VPC considers consumer safety in terms of residues which might enter the food chain and the FAC therefore keeps in touch with developments in this area.

Committee on Medical Aspects of Food Policy (COMA)

15. The COMA is a committee of experts chaired by the CMO. It provides the Government with independent advice on matters relating to nutrition, diet and health. Although COMA meets only twice a year, it operates through a system of sub-committees and expert panels set up to report to COMA on particular matters. Each sub-committee is chaired by a member of COMA. The FAC seeks the advice of COMA on specific nutritional matters, such as the nutritional implications of new developments in fat replacers.

Nutrition Task Force (NTF)

16. The Nutrition Task Force was set up by Ministers to draw up and oversee a programme of action to implement the nutritional aspects of the Government's health strategy as set out in the 'Health of the Nation' White Paper. It is with members of this Task Force that the FAC has set up a joint Working Group to consider the graphical representation of nutrients on food labels (see paragraphs 16 and17 of the main text).

ANNEX II

LIST OF FAC MEMBERS

Members of the Committee are appointed for their personal expertise and do not represent particular interests. In general they are drawn from the areas of academia, the food industry, food law enforcement and consumer affairs.

FAC MEMBERSHIP DURING 1994

Professor Sir Colin Campbell (Chairman) LLB (From 1 November 1994)	Vice-Chancellor, University of Nottingham
Ewan S Page (Chairman) BSc MA PhD DSc CIMgt FBCS C eng FASA (Until 31 October 1994)	Retired Vice-Chancellor, University of Reading
Professor Douglas Georgala (Deputy Chairman) CBE PhD FIFST	Independent Scientific Consultant. Retired Director of the Institute of Food Research
Margaret Ashwell BSc PhD FIFST FRSH	Science Director, British Nutrition Foundation
Robin Evans BSc MChemA CChem FRSC AIFST	Public Analyst, Tayside Regional Council
Joy Hardinge BSc FIFST	Head of Legislation (Flavours and Ingredients), Quest International
Professor Marian Hicks OBE BSc PhD DSc FRCPath (Until 31 October 1994)	Science Director, United Biscuits (UK) Ltd, Group Research and Development Centre
Roger Manley OBE FITSA	County Fair Trading and Advice Officer, Cheshire County Council
Patricia Mann FCAM FIPA CMInst FRSA	Director of External Affairs, J Walter Thompson Company Ltd
Tom Martin BSc MIFST FIBrew	Technical Director, Carlsberg-Tetley Brewing Ltd
Tom Miller BSc FIFST FRSH MHCIMA (From 1 November 1994)	Technical Services Manager, Whitbread plc
Jill Moore OBE	Vice-President of the National Federation of Consumer Groups. Member of the Meat and Livestock Commission's Consumer Committee
Richard Pugh BSc PhD CChem FRSC FIFST FRSA	Technical Director, Tesco Stores Ltd

Professor Christopher Ritson BA (Econ) MAgrSc (From 1 November 1994)	Professor of Agricultural Marketing, University of Newcastle-upon-Tyne
Barbara Saunders BA	Freelance Consultant on Consumer Policy
John Stevens BSc PhD (Until 31 October 1994)	Technical Director, St Ivel Ltd
Philip Strachan MA Cantab FIFST (From 1 November 1994)	Development and Quality Assurance Director, Colman's of Norwich
Roger Whitehead CBE BSc MA PhD CBiol FIBiol Hon MRCP	Director of the Medical Research Council, Dunn Nutrition Unit, Cambridge, UK and The Gambia, West Africa
Professor Frank Woods BSc BM BCh D Phil FFPM FRCP (Lond and Edin)	Head of the Department of Medicine and Pharmacology, Royal Hallamshire Hospital and Dean of the Faculty of Medicine, University of Sheffield

Officials of the Food Advisory Committee Secretariat

Administrative Secretary:	Barbara Richards
Scientific Secretary:	David Watson BSc PhD DMS CBiol MIBiol CChem FRSC (Until April 1994) Julie Norman BSc DPhil (From May 1994)
Administrative Assessor:	Robert McKinley
Scientific Assessor:	John Sherlock BSc PhD CChem FRSC FIFST
Department of Health Assessor:	Norman Lazarus MB BCh BSc PhD FRCPath
Minutes Secretary:	Serena Cooke

ANNEX III

REGISTER OF MEMBERS' INTERESTS

MEMBERS HAVE DECLARED CURRENT PERSONAL AND NON-PERSONAL INTERESTS AS FOLLOWS (AS AT 31 DECEMBER 1994):

	PERSONAL INTERESTS (i.e. those involving payment to the member personally)			NON-PERSONAL INTERESTS		
MEMBER	NAME OF COMPANY	NATURE OF INTEREST	WHETHER CURRENT	NAME OF COMPANY	NATURE OF INTEREST	WHETHER CURRENT
Prof Sir Colin Campbell (Chairman) (appointed to FAC November 1994)	None			Wide range of national and international food companies	Vice-Chancellor of the University of Nottingham which has extensive activity in food science and technology and in topics related to and supported by many companies in the food industry.	Yes
Dr E S Page (Chairman) (retired from FAC in October 1994)	None			Wide range of national and international food companies	Vice-Chancellor of the University of Reading (retired September 1993) which has extensive activity in food science and technology and in topics related to and supported by many companies in the food industry. Trustee of the University of Reading non-academic staff pension fund and of The Research Endowment Trust, both of which have held, hold or may in the future hold investments in the food industry.	No

MEMBER	PERSONAL INTERESTS (i.e. those involving payment to the member personally)			NON-PERSONAL INTERESTS		
	NAME OF COMPANY	NATURE OF INTEREST	WHETHER CURRENT	NAME OF COMPANY	NATURE OF INTEREST	WHETHER CURRENT
Prof. D Georgala (Deputy Chairman)	Unilever plc	Shareholder and Consultant	Yes	None		
	Marks & Spencer plc	Scientific adviser	Yes			
	Dalgety plc	Scientific adviser	Yes			
	Northern Foods plc	Scientific adviser	Yes			
	International Food Information Service	Consultant	Yes			
	Institute of Grocery Distribution	Unpaid chairman of advisory working group on biotechnology	Yes			
	Food and Drink Federation	Unpaid member of working group on biotechnology perception	Yes			
Dr M Ashwell	None			The British Nutrition Foundation	Science Director of the British Nutrition Foundation (a non-profit-making organisation which is registered as a charity), whose work is principally funded by about 50 food and drink companies (both retailers and manufacturers).	Yes
Mr R Evans	None			None		
Mrs J Hardinge	Unilever plc	Shareholder	Yes	None		
	Quest International	Salary				
Prof M Hicks (retired from FAC in October 1994)	United Biscuits (UK) Ltd	Shareholder Salary	Yes	None		
Mr R Manley	None			None		
Miss P Mann	J Walter Thompson Company Ltd	Consultancy	Yes	None		

MEMBER	PERSONAL INTERESTS (i.e. those involving payment to the member personally)			NON-PERSONAL INTERESTS		
	NAME OF COMPANY	NATURE OF INTEREST	WHETHER CURRENT	NAME OF COMPANY	NATURE OF INTEREST	WHETHER CURRENT
Mr P A Martin	Carlsberg-Tetley Brewing Ltd	Salary	Yes	None		
	Allied Domecq	Shares and share options	Yes			
Mr T W Miller (appointed to FAC in November 1994)	Whitbread plc	Salary Shares and share options	Yes	None		
Mrs J Moore	None			None		
Dr R F Pugh	Tesco plc	Salaried Director Shareholder Share Options	Yes	None		
	Horticulture Research International	Non Executive Director	Yes			
	East Herts Research Ltd	Director	Yes			
Prof C Ritson (appointed to FAC in November 1994)	Scottish Salmon Growers Association in collaboration with Marine Harvest and the Chamberlain Partnership	Consultancy	Yes		Dean of the Faculty of Agriculture and Biological Sciences of the University of Newcastle upon Tyne, which has extensive teaching and research interests in food related areas.	Yes
Ms B Saunders	J Sainsbury plc	Member of Advisory Committee on Gene Technology	Yes	None		
Dr J Stevens (retired from FAC in October 1994)	St Ivel Ltd (subsidiary of Unigate plc)	Salaried Director Share options	Yes	None		

MEMBER	PERSONAL INTERESTS (i.e. those involving payment to the member personally)			NON-PERSONAL INTERESTS		
	NAME OF COMPANY	NATURE OF INTEREST	WHETHER CURRENT	NAME OF COMPANY	NATURE OF INTEREST	WHETHER CURRENT
Mr P W Strachan (appointed to FAC in November 1994)	Reckitt & Colman plc	Salary Shareholder	Yes			
	Unilever	Shareholder	Yes	Sir Philip Reckitt Education Trust	Trustee	Yes
	Boots Glaxo Marks and Spencer Scottish and Newcastle SmithsKline Beecham Tesco	Minor shareholdings	Yes			
	Leatherhead Food Research Association	Unpaid member of the Executive Committee	Yes			
Dr R Whitehead (retired from FAC in October 1994)	Not a paid consultant of any company, but does sit on four advisory committees, mainly academic in composition. For two of these he receives a fee for his services: Nestlé Foundation Council, Bristol Myers Squibb Foundation and Rank Prize Funds.		Yes	The Dunn Nutrition Centre	Director of the Medical Research Council's Dunn Nutrition Centre in Cambridge. By the nature of his responsibilities, he advises a wide range of processing and retail companies within the food industry on issues concerning diet and health. Additionally, research links exist between a number of food companies and individual research groups within the Centre under the Director's overall supervision.	Yes

MEMBER	PERSONAL INTERESTS (i.e. those involving payment to the member personally)			NON-PERSONAL INTERESTS		
	NAME OF COMPANY	NATURE OF INTEREST	WHETHER CURRENT	NAME OF COMPANY	NATURE OF INTEREST	WHETHER CURRENT
Prof H F Woods	Cadbury Schweppes Edinburgh Investment Trust Foreign & Colonial Investment Trust Hanson Smith and Nephew	Shareholder	Yes	Wide range of national and international food and chemical companies	Dean of the Faculty of Medicine, University of Sheffield, which has extensive activity in teaching and research in nutrition and toxicology and in topics related to and supported by many companies in the food and chemical industry. Trustee of the Hallamshire and Therapeutics Research Trust Ltd, Harry Bottom Charitable Trust, and Special Trustees for the former United Sheffield Hospitals.	Yes

ANNEX IV

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ANNEX V

LIST OF ABBREVIATIONS

ACNFP	Advisory Committee on Novel Foods and Processes
ADI	Acceptable daily intake
ALARP	As low as reasonably practicable
COT	Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment
DH	Department of Health
EC	European Community
FAC	Food Advisory Committee
FACC	Food Additives and Contaminants Committee
FSC	Food Standards Committee
HSE	Health and Safety Executive
JECFA	Joint FAO/WHO Expert Committee on Food Additives
LGC	Laboratory of the Government Chemist
MAFF	Ministry of Agriculture, Fisheries and Food
MTC	Maximum tolerable concentration
NTF	Nutrition Task Force
PTWI	Provisional tolerable weekly intake
SCF	Scientific Committee for Food
SGCAFS	Steering Group on Chemical Aspects of Food Surveillance

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ACNFP	Advisory Committee on Novel Foods and Processes
ADI	Acceptable daily intake
ALARA	As low as reasonably achievable
COT	Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment
DH	Department of Health
EC	European Community
FAC	Food Advisory Committee
FACC	Food Additives and Contaminants Committee
FSC	Food Standards Committee
GMP	Good Manufacturing Practice
JECFA	Joint FAO/WHO Expert Committee on Food Additives
LGC	Laboratory of the Government Chemist
MAFF	Ministry of Agriculture, Fisheries and Food
PTDI	Provisional tolerable daily intake
[illegible]	[illegible]
PTWI	Provisional tolerable weekly intake
SCF	Scientific Committee for Food
SGCAFS	Steering Group on Chemical Aspects of Food Surveillance

This is the fourth Annual Report of the Food Advisory Committee. It provides a full account of the Committee, its role and membership, the issues it discussed in 1994 and a description of the wide ranging subjects and on-going work it considered.

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